

**GOVERNMENT/INDUSTRY CHARTING FORUM**  
**Instrument Procedures Group**  
**May 9, 2005**  
**HISTORY RECORD**

**FAA Control # 05-01-259**

**Subject: VCOA (Visual Climb Over Airport)**

**Background/Discussion:** TERPS Change 19, Vol 4, Chapter 4, paragraph 4.0 makes VCOA mandatory when obstacles more than 3 statute miles from the departure end of the runway DER require a greater than 200 ft/NM climb gradient. If the pilot determines that he cannot meet the published climb gradient, for whatever reason, the pilot may elect to execute the VCOA if available. AIM paragraph 5-2-6 Instrument Departure Procedure (DP) states ODPs are recommended for obstruction clearances and may be flown without ATC clearance unless an alternate departure procedure (SID or radar vector) has been specifically assigned by ATC. Additionally the AIM states specified ceiling and visibility minima (VCOA or increased takeoff minima) will allow visual avoidance of obstacles until the pilot enters the standard obstacle protection area. Obstacle avoidance is not guaranteed if the pilot maneuvers farther from the airport than the specified visibility minimum prior to reaching the specified altitude. When TERPS is developing a VCOA the greatest visibility to be published is 3 SM, but the vertical climb area (VCA) can be up to a maximum of 7.3 NM + distance from ARP to most distant DER for obstacle evaluation.

1. The interpretation of the AIM paragraph may lead one to believe that the aircraft has to remain within the visibility distance; however, the procedure specialist designed the VCA to a greater distance. This distance limitation, based on visibility, may place the aircraft in an undesirable situation based on performance capabilities.
2. Currently there are published VCOAs that are sectorized, such as Meeker, CO "Climb visually within 3 miles southeast of the airport to depart 7400." Etc., The regulation does not specifically prohibit nor does it provide guidance to develop the VCOA with sectors.

**Recommendations:**

1. Publish a remain within distance in the TAKE-OFF MINIMUMS and (OBSTACLE) DEPARTURE PROCEDURES area; e.g., Visibility 1200-2 ½ for climb in visual conditions, Departure Procedure: Rwy 17, for climb in visual conditions **remain within 2.8 NM**, cross General Dewitt Airport at or above 1100 before proceeding on course.
2. Revise criteria to prohibit the use of sectorization.

**Comments:** This recommendation affects the AIM and FAA Orders 8260.3 and 8260.46.

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**Date:** April 14, 2005

**INITIAL DISCUSSION (Meeting 05-01):** New issue introduced by Larry Wiseman, AFFSA. AFFSA believes there is a disconnect between the TERPS criteria and the AIM guidance; e.g., criteria provides a VCOA obstacle protection area of up to 7.3 NM + the distance from the ARP to the most distant DER, whereas the visibility maxes out at 3 SM. AIM paragraph 5-2-6 may lead pilots that they must remain within the published visibility distance. Tom Schneider agreed to place the issue on the AFS-400 TRB agenda. Larry stated that AFFSA would like to participate in that TRB. Bill Hammett, AFS-420 (ISI) noted that the second portion of the issue paper regarding VCOA sectorization is a criteria issue and should be brought before the TERPS Working Group (TWG). Larry agreed, and will develop a TWG issue paper for the next TWG meeting. **ACTION: AFS-420.**

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**MEETING 05-02:** Tom Schneider, AFS-420, reported that this issue is actively being worked by the AFS-420 staff specialist responsible for departure criteria; however progress is slow. The issue has not been brought before an AFS-400 Technical Review Board (TRB) yet, pending draft criteria revision. The sectorization issue is also being addressed within AFS-420 and was not presented to the TERPS Working Group. **ACTION: AFS-420.**

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**MEETING 06-01:** Tom Schneider, AFS-420, reported that this issue is being actively worked by Phil Prasse, the AFS-420 staff specialist responsible for departure criteria; however, progress is slow. Draft material has been developed; however, no final conclusions have been reached and the material has not been circulated for comment outside FAA. The issue has not been brought before an AFS-400 Technical Review Board (TRB) yet, because travel requirements have kept key staff members from attending. **Editor's Note:** TRB has been scheduled for May 11<sup>th</sup>. **ACTION: AFS-420.**

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